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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,361	11/13/2001	Michael L. Denby	4045-A3	4859

7590 07/07/2003

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[REDACTED] EXAMINER

WALSH, JOHN B

ART UNIT	PAPER NUMBER
3676	

DATE MAILED: 07/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/010,361	DENBY, MICHAEL L.
	<b>Examiner</b>	<b>Art Unit</b>
	John B. Walsh	3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on \_\_\_\_.  
 2a) This action is FINAL.                  2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,4-9 and 12-38 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 1, 4-9 and 12-19 is/are allowed.  
 6) Claim(s) 20-38 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ .	6) <input type="checkbox"/> Other: _____

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 20-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,878,662 to Denby et al. in view of U.S. Patent No. 2,720,804 to Brown.

Denby et al. '662 disclose a handle (52) having a key (54); a piston (64) having a bore (88); a cam (74) having a keyway (78), said cam held by a cap (66).

As concerns claims 21, 27, 33 and 37, the keyway is disposed off center of the cam (column 3, line 59).

As concerns claims 22 and 28, the piston is attached to a removable part of a bicycle (column 3, line 46; axle is removable from the bicycle).

As concerns claims 23 and 29, the piston is attached to a hub (14).

As concerns claims 24, 30 and 34, the hub is attached to a wheel (figure 1).

As concerns claims 25, 31, 35 and 38, the hub is attached to a bicycle frame (figure 1, attached to fork 12).

As concerns claims 32 and 36, a handle (52) having a key (54); a piston (64) attached to an axle (57; column 3, line 46) mounted to a hub (14) attached to a bicycle wheel (figure 1), the piston having a bore (88); a cam (74) having a keyway (78), said cam held by a cap (66).

Denby et al. '662 fail to teach a magnetic attraction/engagement between the cam and key.

Brown '804 teaches a magnetic attraction/engagement between a recess on one element and a key/tool (column 2, lines 28-33; column 3, lines 40-42).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the key and cam of Denby et al. '662 with a magnetic attraction/engagement between the two elements, as taught by Brown '804, in order to better retain the two elements in engagement.

#### ***Allowable Subject Matter***

3. Claims 1, 4-9 and 12-19 are allowed.

#### ***Response to Arguments***

4. Applicant's arguments filed April 28, 2003 have been fully considered but they are not persuasive.

The determination of obviousness is based upon whether a hypothetical person with ordinary skill and knowledge in the art to which the invention pertains with full knowledge of all of the pertinent prior art, when faced with the problem to which the claimed invention is addressed, would be led naturally to the solution adopted in the claimed invention or at least would naturally view that solution as an available alternative. The viewpoint of one of skill in the art when determining obviousness not only encompasses the knowledge that the person of skill would likely possess, but also encompasses information disclosed in the references that the person

would have available for consultation when confronted with the problem that the claimed invention addresses. (*See, e.g. Tvetter v. AB Turn-O-Matic*, 633 F.2d 831, 834, 209 USPQ 22, 25 (9<sup>th</sup> Cir. 1980); *Custom Accessories, Inc. v. Jefferey-Allan Indus., Inc.* 807 F.2d 955, 962, 1 USPQ2d 1196, 1201 (Fed. Cir. 1986)). In the instant case the problem to be solved is engagement between two parts, specifically magnetic attraction for engagement. One of ordinary skill in the art when faced with this problem would naturally be led to Brown '804 for teaching magnetic attraction to be used for engaging one element with another.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 703-305-0444. The examiner can normally be reached on Monday-Friday from 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 703-308-3179. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-872-9325.



Anthony Knight  
Supervisory Patent Examiner  
Technology Center 3670

JW

July 2, 2003